

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due
PO040287	MCM001-VU	1	1	2% 10 Net 30	1201T293	O-Ring Ø0.072 C.S. x Ø0.558 OD receive ea				100	6/25/2018	100		S083964	Stock	6/25/2018	\$ 0.15 / Ea	0	
		2	92356A247		Carriage Bolt receive ea			50	50		S083965	Stock	6/25/2018	\$ 0.25 / Ea	0				
		3	98957A736		Threaded Rod			12	12		S083995	Stock	6/25/2018	\$ 1.81 / Ea	0				
		4	5481A1		Adjustable Spanner receive ea			10	10		S083963	Stock	6/25/2018	\$ 28.69 / Ea	0				
		5	4053K751		Pressure Gauge, 0-300 Psi			4	4		S083992	Stock	6/25/2018	\$ 30.67 / Ea	0				
		6	90281A640		Threaded Stud 3/8-16 X 4.0"			25	25		S083978	Stock	6/25/2018	\$ 1.65 / Ea	0				
		7	91257A890		Bolt			20	20		S083982	Stock	6/25/2018	\$ 9.13 / pcs	0				
		8	MUHMWR3.000-B		UHMW Rod (Round Bar), Black			3	3		S083996	Stock	6/25/2018	\$ 35.05 / ft	0				
Total:										224		224							\$7

200 Aurora Industrial Pkwy  
Aurora OH 44202-8087  
330-995-5500  
cle.sales@mcmaster.com

Dart Aerospace Ltd  
1270 Aberdeen St  
Hawkesbury ON K6A 1K7  
Canada

Purchase Order  
**PO040287**

Order Placed By  
**Chantal Lavoie**

McMaster-Carr Number  
**5327964-03**

Page 1 of 1

06/21/2018

Line	Product	Ordered	Shipped
1	<b>92356A247</b> 18-8 Stainless Steel Square-Neck Carriage Bolt, 10-24 Thread Size, 1" Long, Packs of 50	<b>1</b> Pack	<b>1</b>
3	<b>5481A1</b> Adjustable Pin Spanner Wrench for Holes on The Face for 5/8" to 2" Circle Diameter	<b>10</b> Each	<b>10</b>
4	<b>4053K751</b> Vibration-Resistant Pressure Gauge with 304 Stainless Steel Case, 1/4 NPT Male Bottom Connection, 2-1/2" Dial, 0 to 300 PSI	<b>4</b> Each	<b>4</b>
5	<b>90281A640</b> Setup Stud, 3/8"-16 Thread Size, 4" Long, 1-1/4" Long Threads	<b>25</b> Each	<b>20</b>
6	<b>91257A890</b> Zinc Yellow-Chromate Plated Hex Head Screw, Grade 8 Steel, 3/4"-16 Thread Size, 9" Long, Packs of 1	<b>20</b> Packs	<b>20</b>

JUN 25 2018

Shipped separately from our Chicago warehouse on 06/21

5	<b>90281A640</b> Setup Stud, 3/8"-16 Thread Size, 4" Long, 1-1/4" Long Threads	<b>25</b> Each	<b>5</b>
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Aurora OH 44202-8087  
330-995-5500  
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Dart Aerospace Ltd  
1270 Aberdeen St  
Hawkesbury ON K6A 1K7  
Canada

Purchase Order  
**PO040287**

Order Placed By  
**Chantal Lavoie**

McMaster-Carr Number  
**5327964-02**

Page 1 of 1

06/21/2018

Line	Product	Ordered	Shipped
2	98957A736 Grade B7 Medium-Strength Steel Threaded Rod, 1/2"-13 Thread Size, 6 Feet Long	2 Each	2
7	9900K39 Antistatic UHMW Rod, 3" Diameter, 3' Length	3 Feet	3

JUN 25 2018

Shipped separately from our Chicago warehouse on 06/21

5	90281A640 Setup Stud, 3/8"-16 Thread Size, 4" Long, 1-1/4" Long Threads	25 Each	5
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200 Aurora Industrial Pkwy  
Aurora OH 44202-8087  
330-995-5500  
cle.sales@mcmaster.com

Dart Aerospace Ltd  
1270 Aberdeen St  
Hawkesbury ON K6A 1K7  
Canada

Purchase Order  
**PO040287**

Page 1 of 1

06/21/2018

Order Placed By  
**Chantal Lavoie**

McMaster-Carr Number  
**5327964-01**

Line	Product	Ordered	Shipped
5	90281A640 Setup Stud, 3/8"-16 Thread Size, 4" Long, 1-1/4" Long Threads	25 Each	5
Shipped separately from our Cleveland warehouse on 06/21		DAS 6 9-89	
1	92356A247 18-8 Stainless Steel Square-Neck Carriage Bolt, 10-24 Thread Size, 1" Long	1 Pack	1
2	98957A736 Grade B7 Medium-Strength Steel Threaded Rod, 1/2"-13 Thread Size, 6 Feet Long	2 Each	2
3	5481A1 Adjustable Pin Spanner Wrench for Holes on The Face for 5/8" to 2" Circle Diameter	10 Each	10
4	4053K751 Vibration-Resistant Pressure Gauge with 304 Stainless Steel Case, 1/4 NPT Male Bottom Connection, 2-1/2" Dial, 0 to 300 PSI	4 Each	4
5	90281A640 Setup Stud, 3/8"-16 Thread Size, 4" Long, 1-1/4" Long Threads	25 Each	20
6	91257A890 Zinc Yellow-Chromate Plated Hex Head Screw, Grade 8 Steel, 3/4"-16 Thread Size, 9" Long	20 Packs	20
7	9900K39 Antistatic UHMW Rod, 3" Diameter, 3' Length	3 Feet	3



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# **PURCHASE ORDER** **PO040287**

**Supplier:** MCM001-VU  
McMaster-Carr Supply Co,  
P.O. Box 7690  
Chicago, IL 60680-7690 USA  
Phone: 330 995 5500  
Fax: 330 995 9600

**PO No:** PO040287

**PO Date:** 6/21/18

**Due Date:** 6/25/18

**Purchase Order**

**Revision:**

**Revision Date:**

**Ship-To Contact:** Lavoie, Chantal  
clavoie@dartaero.com

**E-MAILED**

**JUN 21 2018**

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**Via:** Ground

**Pynt Terms:** 2% 10 Net 30

**Freight Terms:**

**Special Comments:**

## Items

Line Item	Job	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1		1201T293	100/pk	O-Ring Ø0.072 C.S. x Ø0.558 OD receive ea	Firmed	6/25/18	100 Ea	0 Ea	100 Ea	\$0.1482/Ea	\$14.82
2		92356A247	50/pk	Carriage Bolt receive ea	Firmed	6/25/18	50 Ea	0 Ea	50 Ea	\$0.248/Ea	\$12.40
3		98957A736	6 ft long	Threaded Rod	Firmed	6/25/18	12 Ea	0 Ea	12 Ea	\$1.81/Ea	\$21.72
4		5481A1	1/pk	Adjustable Spanner receive ea	Firmed	6/25/18	10 Ea	0 Ea	10 Ea	\$28.69/Ea	\$286.90
5		4053K751	4053K15	Pressure Gauge, 0-300 Psi	Firmed	6/25/18	4 Ea	0 Ea	4 Ea	\$30.67/Ea	\$122.68
6		90281A640	1/pk	Threaded Stud 3/8-16 X 4.0"	Firmed	6/25/18	25 Ea	0 Ea	25 Ea	\$1.65/Ea	\$41.25
7		91257A890	1/pk	Bolt	Firmed	6/25/18	20 pcs	0 pcs	20 pcs	\$9.13/pcs	\$182.60
8		MUHMWR3.000-B	9900K39 3 FT	UHMW Rod (Round Bar), Black	Firmed	6/25/18	3 ft	0 ft	3 ft	\$35.05/ft	\$105.15
<b>Grand Total:</b>											<b>\$787.52</b>

## Order Notes

**JUN 25 2018**

*CL*

**Order Notes**

## Procurement Quality Clauses

A005 RIGHT OF ENTRY

A016 PERSONNEL QUALIFICATION

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A032 DOCUMENT SPECIAL REQUIREMENTS

A033 STATEMENT OF CONFORMITY/TEST RECORDS FOR NAS, AN and MS FASTENERS

A040 NOTIFICATION OF QUALITY ESCAPE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENTS

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

*Plex 6/21/18 3:06 PM dart.lavoie.chantal*

## Chantal Lavoie

---

**From:** Jean Francois Sauve  
**Sent:** Thursday, June 21, 2018 11:10 AM  
**To:** Chantal Lavoie  
**Subject:** FW: New materiel

Allo Chantal,

J'aurais besoin de commander une nouvelle grandeur de UHMW. Voici le p/n de chez McMaster.

P/N : 9900K39 (3" Round Bar) Une longueur de 2' svp.

x3 ft

Le # est entré comme suis dans le système. MUHMWR3.000-B.

---

Aussi, on aurait besoin de Sticker Orange 3/4" de Dia P/N : 15395T66 (Orange)

Qty. de 8 svp.

Merci  
JFS

**From:** Kim Johnston  
**Sent:** June-21-18 10:45 AM  
**To:** Jean Francois Sauve <jfsauve@dartaero.com>  
**Subject:** RE: New materiel

done

Thanks,

**Kim Johnston**  
*Engineering Clerk*  
*Document Administrator*

**DART AEROSPACE**  
T 1 613 632-5200 > 226  
F 1 613 632-9311



**From:** Jean Francois Sauve  
**Sent:** Thursday, June 21, 2018 10:03 AM  
**To:** Kim Johnston <kjohnston@dartaero.com>  
**Subject:** New materiel

Hi Kim,

Can you please enter this new material in the system.

## Chemical-Resistant Viton® Fluoroelastomer O-Ring for Straight-Thread Tube Fitting, Mil. Spec., Dash 905

\$14.82 per pack of 100  
1201T293

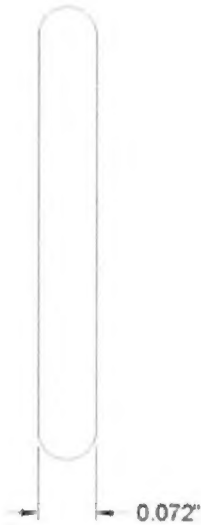
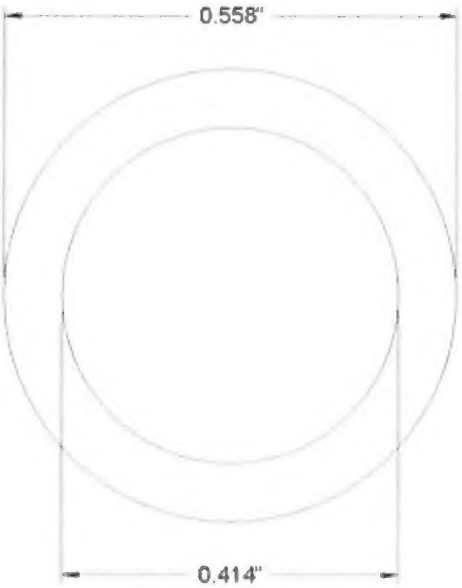


Material	Viton® Fluoroelastomer Rubber
Cross Section Shape	Round
Dash Number	905
For Tube OD	5/16"
Width	0.072"
ID	0.414"
OD	0.558"
Hardness	Durometer 75A (Medium)
For Use With	Ammonium Hydroxide Animal Oils Benzene Boric Acid Butyl Alcohol Calcium Hydroxide Citric Acid Diluted Salt Solutions Ethanol Ethylene Glycol Glycerin Grease Hydraulic Oils Isopropyl Alcohol Mineral Oils Motor Oil Nitric Acid Petroleum Fluids Phosphoric Acid Sodium Bicarbonate Transmission Fluid Vegetable Oils
Specifications Met	ASTM D2000, MIL-R-83248C, SAE AS568, SAE J200
Temperature Range	0° to 400° F
Color	Black
RoHS	Compliant

Also known as Boss O-rings, these Viton® fluoroelastomer O-rings are for use in tube fittings with a stright-thread connection. They meet MIL-R-83248C. They resist chemicals such as benzene, butyl alcohol, and ethylene glycol. All have a round profile and are suitable for a wide range of static and dynamic sealing applications. These O-rings are sized to the SAE standard AS568.



Fits 5/16" Tube OD



**McMASTER-CARR** CAD  
<http://www.mcmaster.com>  
© 2015 McMaster-Carr Supply Company  
Information in this drawing is provided for reference only.

PART NUMBER	<b>1201T293</b>
O-Ring for Straight Thread Tube Fittings	

The information in this 3-D model is provided for reference only.



200 Aurora Industrial Pkwy  
Aurora OH 44202-8087  
330-995-5500  
cle.sales@mcmaster.com

Dart Aerospace Ltd  
1270 Aberdeen St  
Hawkesbury ON K6A 1K7  
Canada

Purchase Order  
**PO040287**

Order Placed By  
**Chantal Lavoie**

McMaster-Carr Number  
**5327964-11**

Page 1 of 1

06/21/2018

Line	Product	Ordered	Shipped
1	<b>1201T293</b> Chemical-Resistant Viton Fluoroelastomer O-Ring for Straight-Thread Tube Fitting, Mil. Spec., Dash 905, Packs of 100	<b>1</b> <b>Pack</b>	<b>1</b>

DAS  
6  
9-89

JUN 25 2018

Antistatic UHMW Rod  
3" Diameter

Antistatic UHMW Rod, 3" Diameter | McMaster-Carr

In stock  
\$35.05 per ft.  
9900K39



Material	UHMW Plastic
Cross Section Shape	Round
Construction	Solid
Texture	Smooth
Color	Black
Clarity	Opaque
Diameter	3"
Diameter Tolerance	0.000" to +0.187"
Tolerance Rating	Oversized
Length	1 ft., 2 ft., 3 ft., 4 ft., 5 ft.
Hardness	Durometer 70D
Hardness Rating	Medium
For Use Outdoors	Yes
Temperature Range	-20° to 180° F
Impact Strength	16.80 ft.-lbs./in.
Impact Strength Rating	Excellent
Tensile Strength	2,400 psi
Tensile Strength Rating	Poor
Surface Resistivity	10 <sup>9</sup> ohms/sq. 4
Specifications Met	ASTM D4020, UL 94V2
Density	0.034 lbs./cu. in.
Coefficient of Friction	0.19
Dielectric Strength	450 V/Mil
Water Absorption	0.01%
Coefficient of Thermal Expansion	1.4 x 10 <sup>-4</sup> in./in./ F
RoHS	Compliant

With a surface resistivity of  $10^9$  ohms/sq., these rods are often used as bushings and bearings in applications where static electricity is a concern. They have a slippery surface and offer excellent wear and impact resistance.

PURCHASE MATERIAL UHMW TUBING PER ASTM D 4020-01

PART NUMBER: MUHMWTR | D.DDD | W | .TTT | WALL | C | COLOR: B = BLACK  
W = WHITE

EG. 3.500" OD X 0.280" WALL TUBING = MUHMWTR3.500W.280

RELEASED  
R 2009-11-24  
NP

A	REV	NEW / ISSUE	DESCRIPTION	MB	BY	DATE
DESIGN						
DRAWN						
CHECKED						
MFG. APPR.						
APPROVED						
DE APPR.						
DATE		09.10.19				

DART AEROSPACE LTD	
HAWKESBURY, ONTARIO, CANADA	
DRAWING NO.	REV. A
MUHMWTR	SHEET 1 OF 1
TITLE	SCALE
UHMW TUBING	NTS
COPYRIGHT © 2009 BY DART AEROSPACE LTD	

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M114MWR 3.000-B  
 DATE: 18/06/26

PO / BATCH NO.: P0040287/5083926

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 3ft  
 QUANTITY INSPECTED: 3ft  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 3"  
 THICKNESS RECEIVED: 3"  
 SHEET SIZE ORDERED: —  
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT FINISH	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORROSION	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT GRAIN DIRECTION	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="radio"/> N <input type="radio"/>	ASTM D4020
CORRECT THICKNESS	Y <input checked="" type="radio"/> N <input type="radio"/>	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT REF # TO LINK CERT	Y <input checked="" type="radio"/> N <input type="radio"/>	P0040287
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="radio"/> N <input type="radio"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input type="radio"/> N <input checked="" type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input type="radio"/> N <input checked="" type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u> <span style="float: right; font-size: small;">DAS 8</span> DATE: <u>18/06/26</u> <span style="float: right; font-size: small;">9:59</span>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in